

# Standards of Public Land Health

## Evaluation of 63033 COOPER'S GALLO Allotment

### [ 12/22/2009 ]

The Roswell Field Office conducted rangeland health assessments at 3 study sites within 63033 COOPER'S GALLO. The assessments looked at the Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data was incorporated into and in support of the field assessment. The summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
63033-BUCK-E080	X			X			N/A		
63033-NORTH-E078	X			X			N/A		
63033-SOUTH #1-E079	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on the Cooper's Gallo allotment, 63033. Ten of these assessed soil site stability, 11 hydrologic functions and 13 biotic integrity. These qualitative assessments in conjunction with quantitative information gathered from previous data collected at the trend study plot location within the allotment were utilized to make rangeland health determination. Quantitative evaluation are performed by the Roswell Field Office interdisciplinary teams, which include some or all of the following; ground and vegetative cover and composition, production, frequency and ecological condition. The collections which were initiated in the late 1970's/early 1980's are scheduled and conducted approximately every 5 years. This allotment is in the "M" (Maintain) category.

This allotment contains 4,463 acres of public land. The studies are located on two Shallow Limestone CP-3 ecological sites and one Loamy CP-3 ecological site. All of the 22 indicators were rated as either 'None to Slight' or 'Slight to Moderate' degree of departure from the Ecological Site description and/or Ecological Reference Area(s). The majority of the indicators at all three study locations fell in the 'None to Slight' category. There are no riparian areas on the public land in this allotment.

**Recommendations:** With the all of the indicators fall in the 'None to Slight' or 'Slight to Moderate' category, this allotment is reated as "Meeting" the standard for Rangeland Health. Continue the rangeland monitoring studies to insure proper stocking rates are maintained and that the perennial grass cover and good plant composition remains.

RFOs Upland and Biotic Standard Assessment Summary Worksheet						
SITE 63033-BUCK-E080						
Legal Land Desc	NWSE 1 0040S 0170E Meridian 23	Acreage		472		
Ecosite	070CY102NM SHALLOW LIMESTONE	Photo Taken		Y		
Watershed	13060006030 PADILLA					
Observers	COLBERT, ORTEGA	Observation Date		12/22/2009		
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad				
Soil Map Unit	011	Soil Taxon Name		DEAMA		
Texture Class	NM632 CBV-L	Soil Phase		DEAMA		
Texture Modifier	NM632 VERY COBBLY LOAM					
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation				
NOAA Annual Precipitation		NOAA Growing Season Precipitation				
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation				
Disturbances and Animal Use:						
<b>Part 2. Attributes and Indicators</b>						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:	Bare ground percentages as expected.					

S H	Gullies					X
Comments:						
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	Rock armor					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:	Limestone site.					
B	Functional/Structural Groups				X	
Comments:	sachista slightly more than expected for the site.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:						
B	Invasive Plants				X	
Comments:	sachista or beargrass present					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						

B	Wildlife Populations					X
Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable					
B	Special Status Species Populations					
Comments:	Not applicable					
<b>Part 3. Summary</b>						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	0	10
H	Hydrologic	0	0	0	0	11
B	Biotic	0	0	0	3	8
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes: All expected species present.						

SITE 63033-NORTH-E078			
Legal Land Desc	NENW 35 0030S 0170E Meridian 23	Acreage	2242
Ecosite	070CY109NM LOAMY CP-3	Photo Taken	Y
Watershed	13060006020 GALLO		
Observers	COLBERT, ORTEGA	Observation Date	12/22/2009
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	013	Soil Taxon Name	DEAMA
Texture Class	NM632 L	Soil Phase	DEAMA-PASTURA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

## Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:						
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies				X	
Comments:	as expected for this site.					

S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:	very good functional/structural group					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production					X
Comments:						
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X
Comments:						

B	Special Status Species Habitat					
Comments:	Not applicable.					
B	Special Status Species Populations					
Comments:	Not applicable.					
<b>Part 3. Summary</b>						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	1	9
H	Hydrologic	0	0	0	1	10
B	Biotic	0	0	0	0	11
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes:						





## RFOs Upland and Biotic Standard Assessment Summary Worksheet

### SITE 63033-SOUTH #1-E079

Legal Land Desc	SWNE 11 0040S 0170E Meridian 23	Acreage	1749
Ecosite	070CY102NM SHALLOW LIMESTONE	Photo Taken	Y
Watershed	13060006030 PADILLA		
Observers	COLBERT, ORTEGA	Observation Date	12/22/2009
County Soil Survey	NM632 LINCOLN	Soil Var/Taxad	
Soil Map Unit	011	Soil Taxon Name	DEAMA
Texture Class	NM632 CBV-L	Soil Phase	DEAMA
Texture Modifier	NM632 VERY COBBLY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation		NOAA Growing Season Precipitation	
NOAA Avg Annual Precipitation		NOAA Avg Growing Season Precipitation	
Disturbances and Animal Use:			

### Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns					X
Comments:	Medium evidence of past erosion.					
S H	Pedestals and/or Terracettes					X
Comments:						
S H	Bare Ground					X
Comments:						
S H	Gullies					X

Comments:	Channels are stable					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:	Uniform distribution.					
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:						
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:						
B	Annual Production				X	
Comments:	80% of potential production					
B	Invasive Plants					X
Comments:						
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:						
B	Wildlife Habitat					X
Comments:						
B	Wildlife Populations					X

Comments:						
B	Special Status Species Habitat					
Comments:	Not applicable.					
B	Special Status Species Populations					
Comments:	Not applicable.					
<b>Part 3. Summary</b>						
A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.						
Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	0	0	10
H	Hydrologic	0	0	0	0	11
B	Biotic	0	0	0	1	10
B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the <i>Does not Meet</i> column, Moderate becomes <i>May Need More Info</i> , and Slight to Moderate and None to Slight merge to form the <i>Meets</i> columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.						
Attribute	Rationale	Does Not Meet	May Need More Info	Meets		
Soil		0	0	10		
Hydrologic		0	0	11		
Biotic		0	0	11		
Site Notes: Species present include hairy grama, black grama, blue grama, sideoats grama, tobosa, sachuista, cholla, yucca, desert holly.						

## **Determination of Public Land (Rangeland) Health for 63033 COOPER'S GALLO**

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Cooper's Gallo, allotment #63033, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ J. Howard Parman  
Acting Assistant Field Manager

02/18/2010  
Date